UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,560	08/13/2001	Lorraine E. Reeve	MBHB00-669-A	7162

20306 7590 04/29/2003

MCDONNELL BOEHNEN HULBERT & BERGHOFF
300 SOUTH WACKER DRIVE
SUITE 3200
CHICAGO, IL 60606

EXAMINER
THERKORN, ERNEST G

ART UNIT	PAPER NUMBER
1723	12

DATE MAILED: 04/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/928,560	REEVE
Examiner	**Art Unit**
THERKORN	1723

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) [X] Responsive to communication(s) filed on Apr. 14, 2003.

2a) [X] This action is **FINAL**. 2b) [ ] This action is non-final.

3) [ ] Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) [X] Claim(s) 1-4, 6, 7, 9-19, and 21 is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) [ ] Claim(s) _____ is/are allowed.

6) [X] Claim(s) 1-4, 6, 7, 9-19, and 21 is/are rejected.

7) [ ] Claim(s) _____ is/are objected to.

8) [ ] Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) [ ] The specification is objected to by the Examiner.

10) [ ] The drawing(s) filed on _____ is/are a) [ ] accepted or b) [ ] objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) [ ] The proposed drawing correction filed on _____ is: a) [ ] approved b) [ ] disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) [ ] The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) [ ] Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) [ ] All b) [ ] Some* c) [ ] None of:

1. [ ] Certified copies of the priority documents have been received.
2. [ ] Certified copies of the priority documents have been received in Application No. _____.
3. [ ] Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) [ ] Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) [ ] The translation of the foreign language provisional application has been received.

15) [ ] Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) [ ] Notice of References Cited (PTO-892)
2) [ ] Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) [ ] Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) [ ] Interview Summary (PTO-413) Paper No(s). _____
5) [ ] Notice of Informal Patent Application (PTO-152)
6) [ ] Other:

Claims 1-4, 6-7, 8-19, and 21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. No support can be found for "that are composed of repeating units that do not contain functional groups capable of carrying a charge at neutral pH" can be found. As such, the claims are considered to be drawn to new matter.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-7, 8-19, and 21 are rejected under 35 U.S.C. 102(B) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Reeve (U.S. Patent No. 5,800,711). The claims are considered to read on Reeve (U.S. Patent No. 5,800,711). However, if a difference exists between the claims and Reeve (U.S. Patent No. 5,800,711), it would reside in optimizing

the steps of Reeve (U.S. Patent No. 5,800,711). It would have been obvious to optimize the steps of Reeve (U.S. Patent No. 5,800,711) to enhance separation.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reeve (U.S. Patent No. 5,800,711) in view of either Hatti-Kaul Aqueous Two Phase Systems and Protocols, Humana Press (2000) pages 1-9 or that which is conceded to be old on page 7 of the specification. At best, the claims differ from Reeve (U.S. Patent No. 5,800,711) in reciting use of an incompatible polymer in place of salt. Protocols, Humana Press (2000) pages 1-9 on pages 1 and 2 discloses that polymer-polymer and polymer-salt aqueous two-phase systems are alternatives that have advantages over conventional extraction. Page 7, the last full paragraph of the specification concedes that polymer-polymer and polymer-salt two-phase systems are alternatively used for the fractionation of synthetic polymers. It would have been obvious to use an incompatible polymer in Reeve (U.S. Patent No. 5,800,711) either because Protocols, Humana Press (2000) pages 1-9 on pages 1 and 2 discloses that polymer-polymer and polymer-salt aqueous two-phase systems are alternatives that have advantages over conventional extraction or because page 7, the last full paragraph of the specification concedes that polymer-polymer and polymer-salt two-phase systems are alternatively used for the fractionation of synthetic polymers.

The remarks urge patentability based upon the allegation that Reeve (U.S. Patent No. 5,800,711) discloses use of an organic solvent. However, the claims read on processes that contain an organic solvent.

The remarks urge patentability based upon use of a sulfate. However, Reeve (U.S. Patent No. 5,800,711) discloses use of a sulfate on column 5, line 65; column 11, line 33; and column 12, line 32.

The remarks urge patentability based upon the material treated. However, the species elected in the response of January 6, 2003 is poloxamer. Reeve (U.S. Patent No. 5,800,711) claims poloxamer in claims 16, 31, and 32.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to E. Therkorn at telephone number (703) 308-0362.

Ernest G. Therkorn
Primary Examiner
Art Unit 1723

EGT/12
January 16, 2003